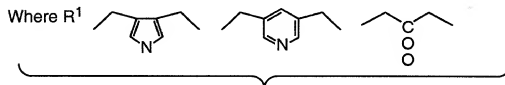
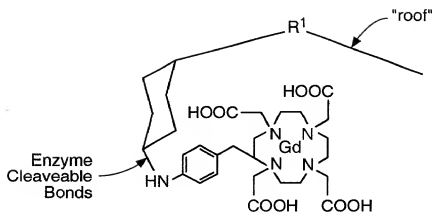
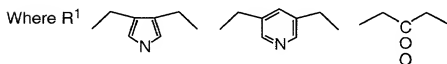
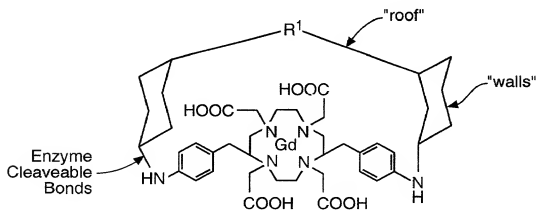


1 / 24

**FIG._1****FIG._2**

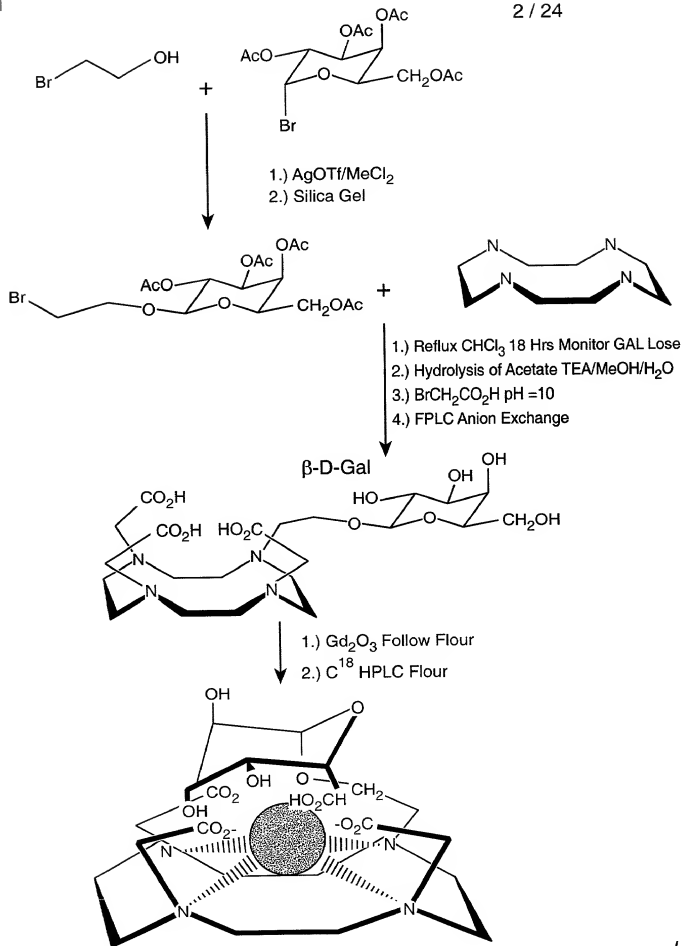
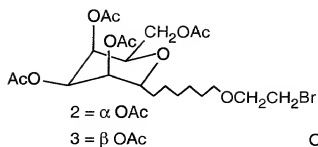


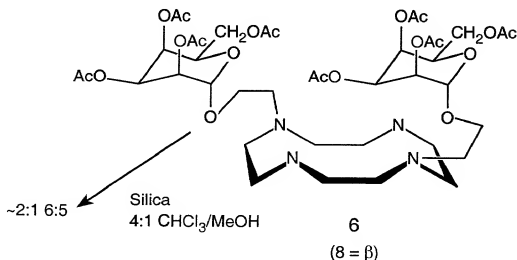
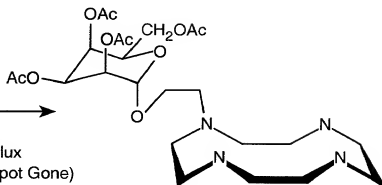
FIG._3

3 / 24



1 + 2

CHCl₃
48 Hrs Reflux
T.L.C. (2 Spot Gone)



8

- 1.) Hydrolysis Of Acetate
TCA/MeOH / H₂O
- 2.) BrCH₂CO₂H pH = 10
- 3.) FPLC Cation Exchange
pH = 2 Acetic Acid Gradient

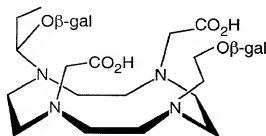
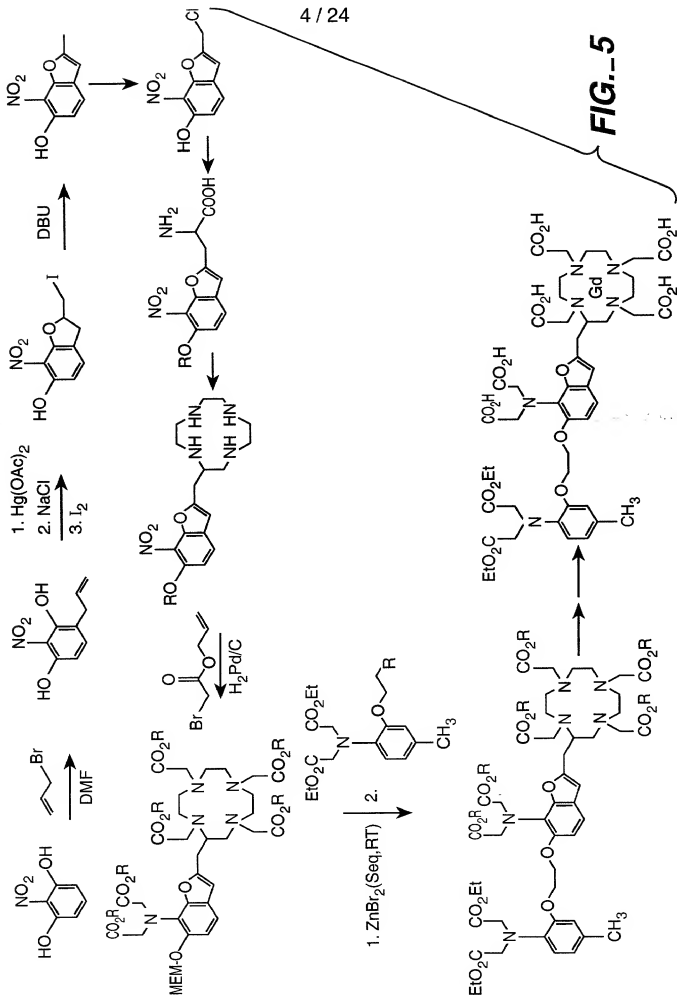
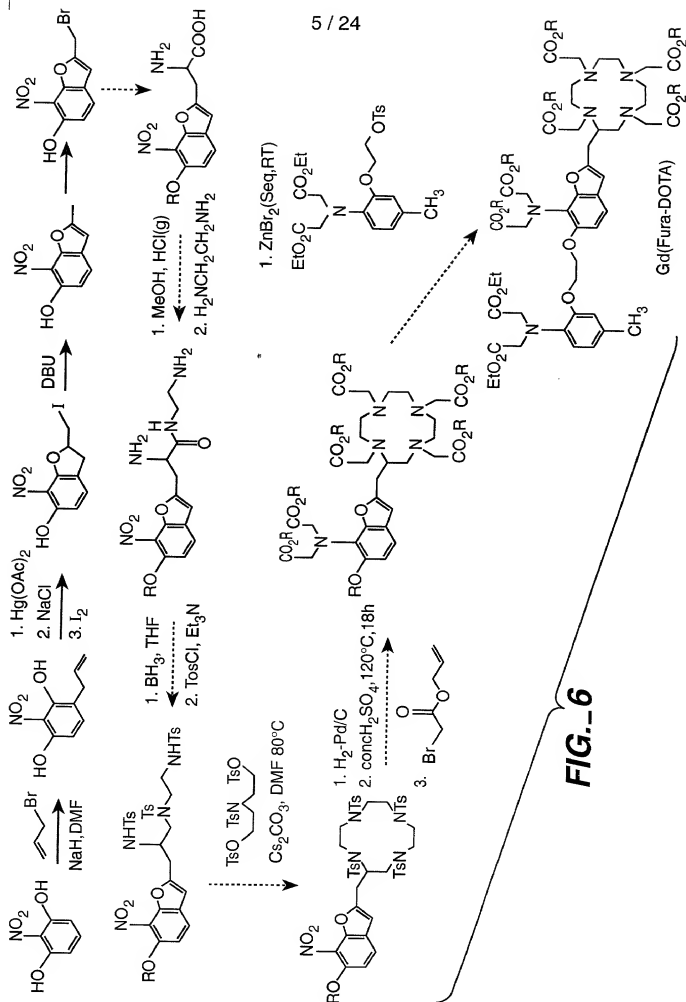


FIG._4

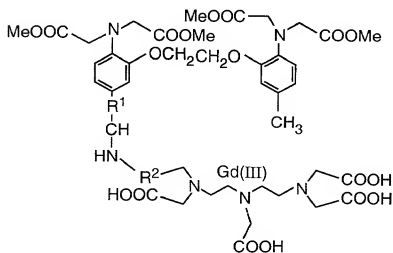
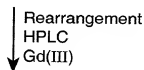
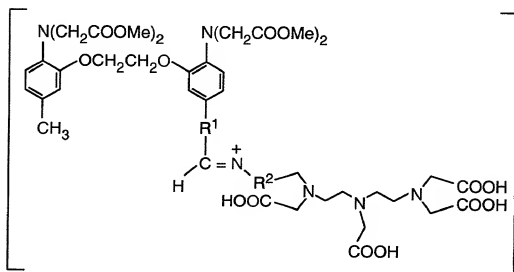
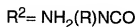
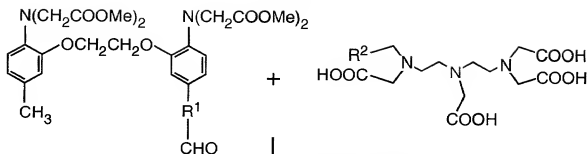
FIG. 5



5 / 24



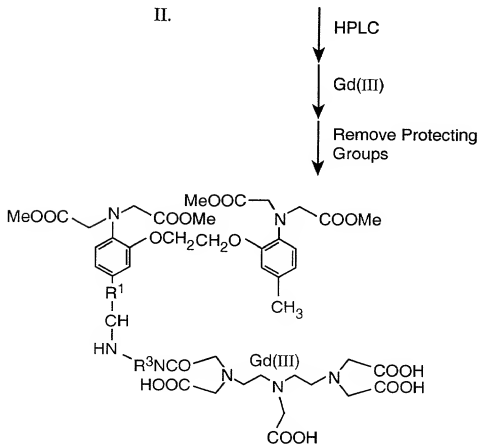
6 / 24


FIG. 7

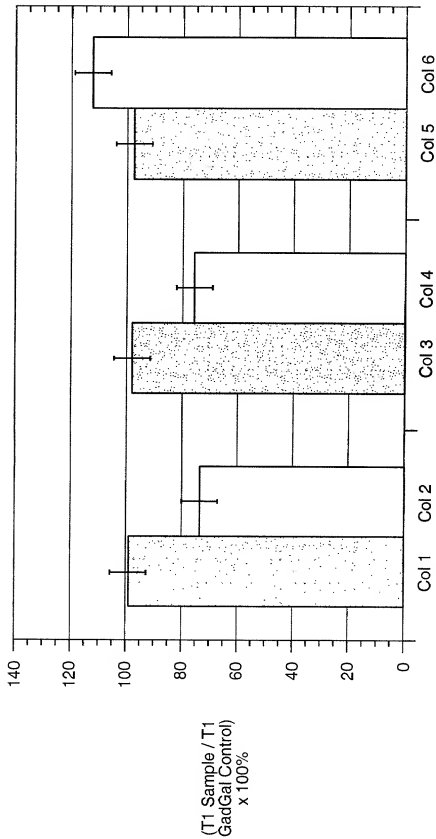
09361511

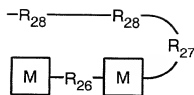
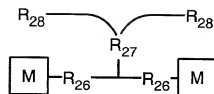
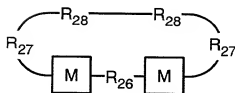
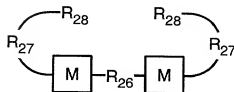
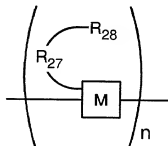
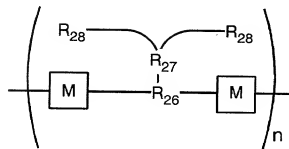
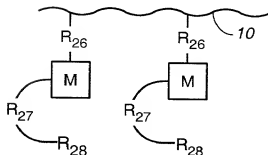
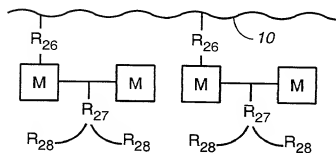


+ DTPA(Anhydride)

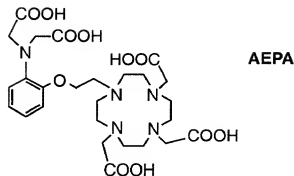


+

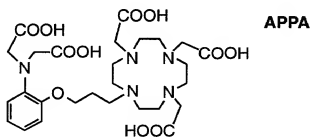
**FIG..9**

**FIG. 10A****FIG. 10B****FIG. 10C****FIG. 10D****FIG. 10E****FIG. 10F****FIG. 10G****FIG. 10H****FIG. 10I**

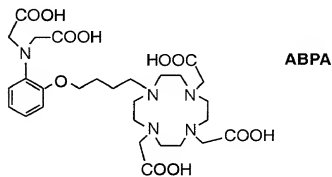
10 / 24



1-o-aminophenoxy-2-(cyclen)ethane-N,N,N',N'',N'''-pentaacetic acid

FIG._ 11A

1-o-aminophenoxy-3-(cyclen)propane-N,N,N',N'',N'''-pentaacetic acid

FIG._ 11B

1-o-aminophenoxy-4-(cyclen)butane-N,N,N',N'',N'''-pentaacetic acid

FIG._ 11C



12 / 24

2021020*21599860

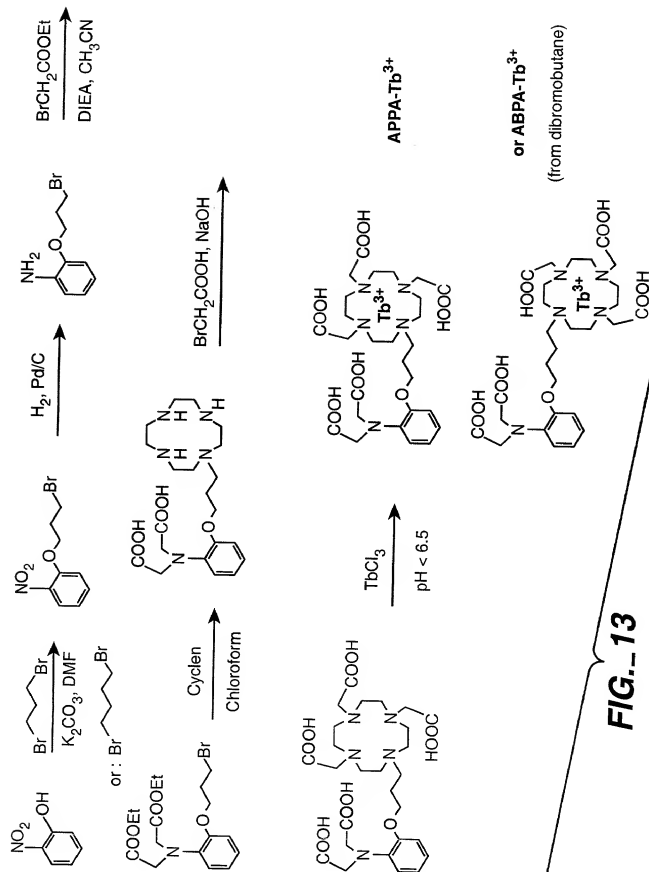


FIG. 13

13 / 24

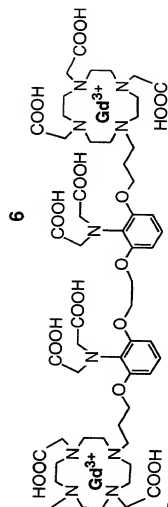
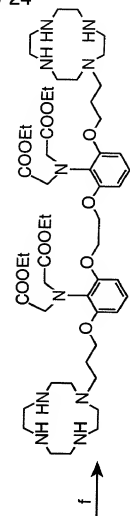
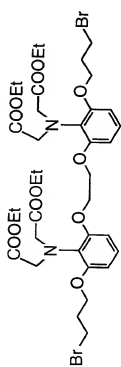
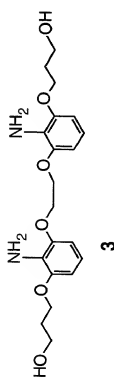
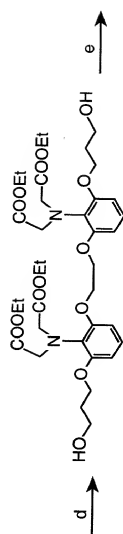
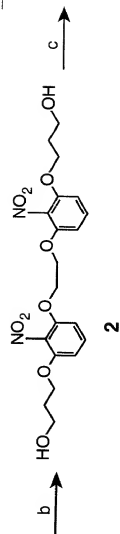
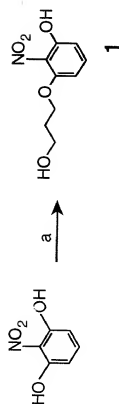
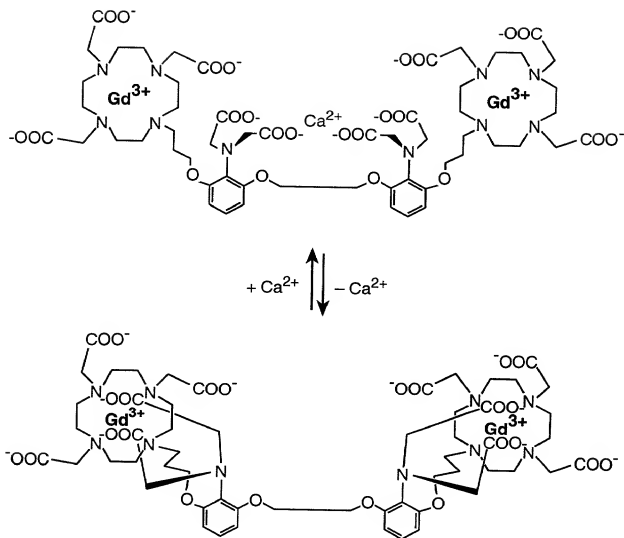
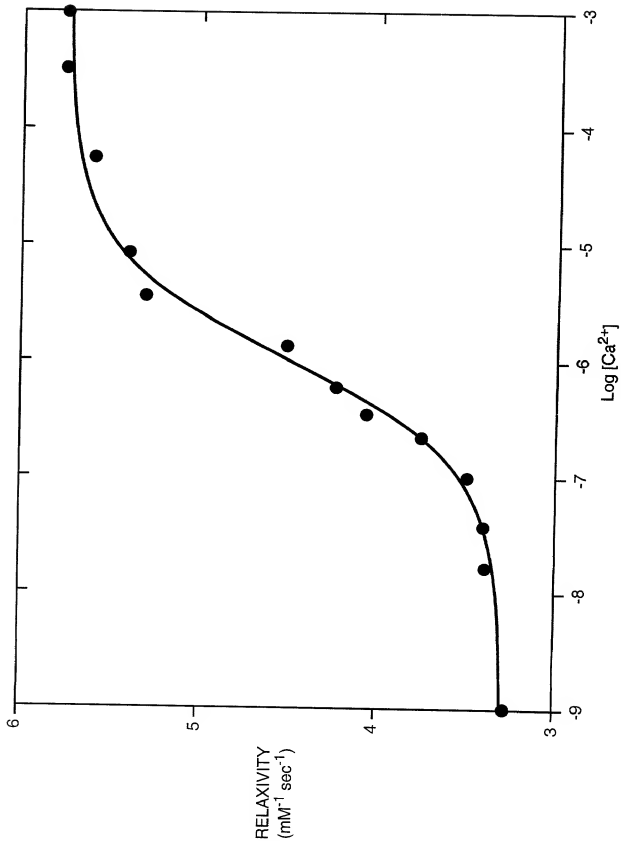
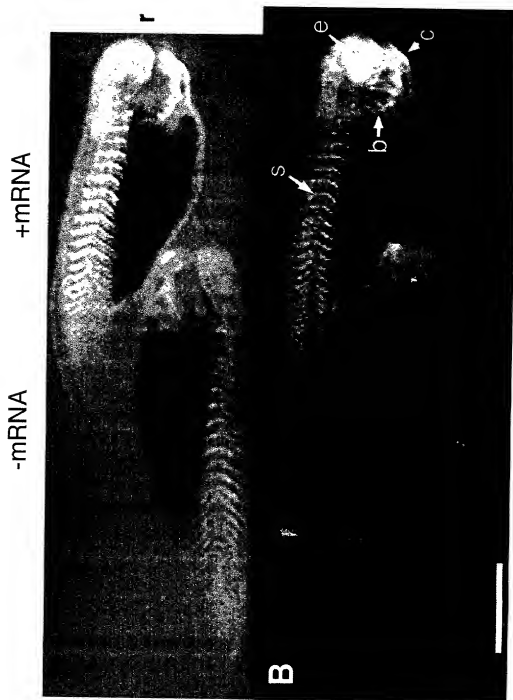


FIG. 14

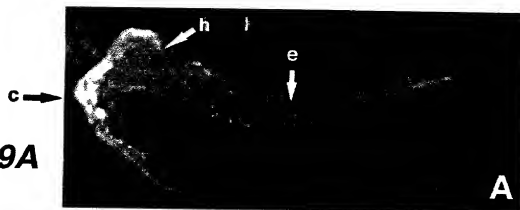
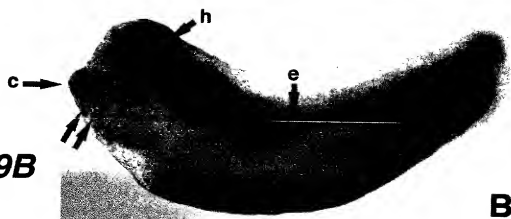
**FIG. 15**

202120*21599860

**FIG. 16**

**FIG. 17**

09866512.031302

FIG._18A**FIG._18B****FIG._18C****FIG._19A****FIG._19B**

00866512, 021302

20250720 21599860

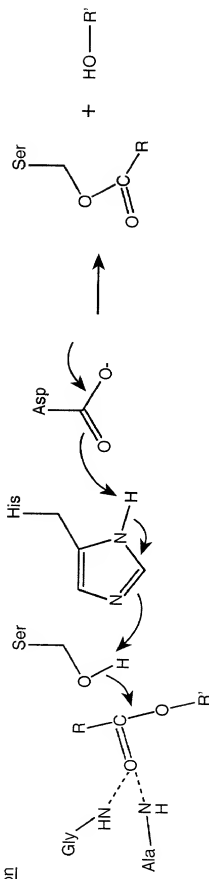
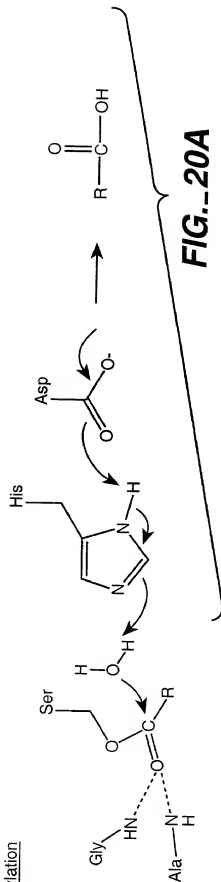
Esterase Activation

Properties of Carboxylesterases:

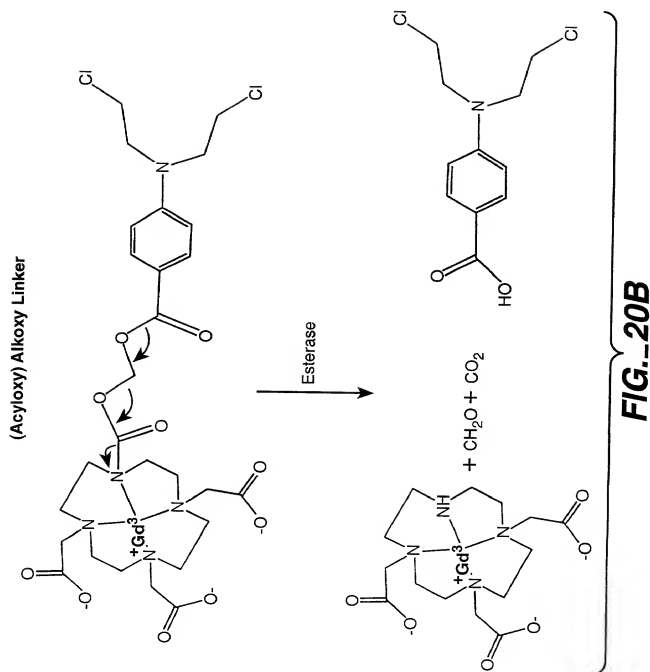
1. Efficient Cleavage of Ester Functional Groups



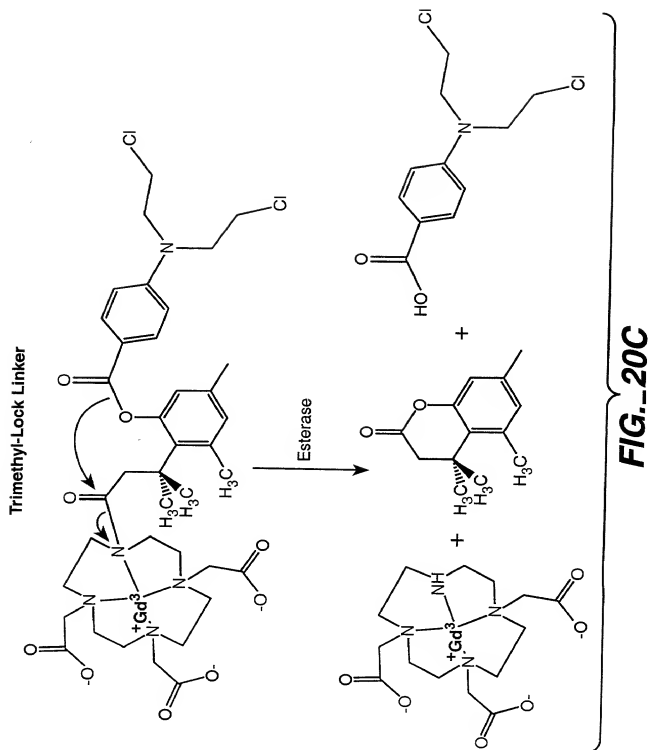
2. Belongs to the Family of Ser-His-Asp Active Site Enzymes (Serine Protease)

AcylationDeacylation**FIG..20A**

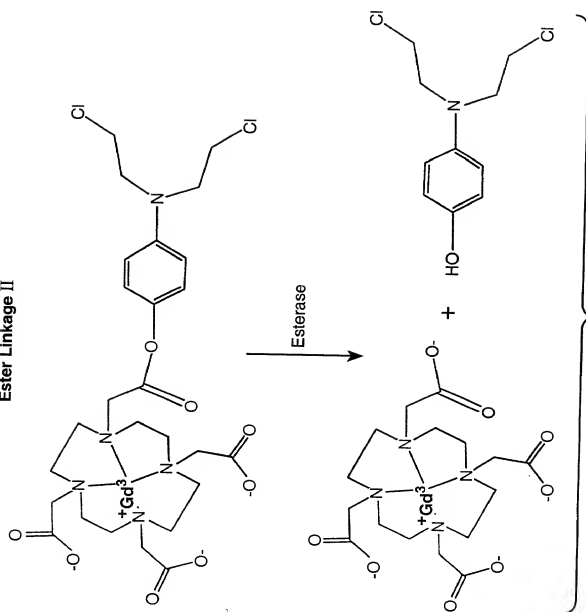
202120*21599860



202120*21999860

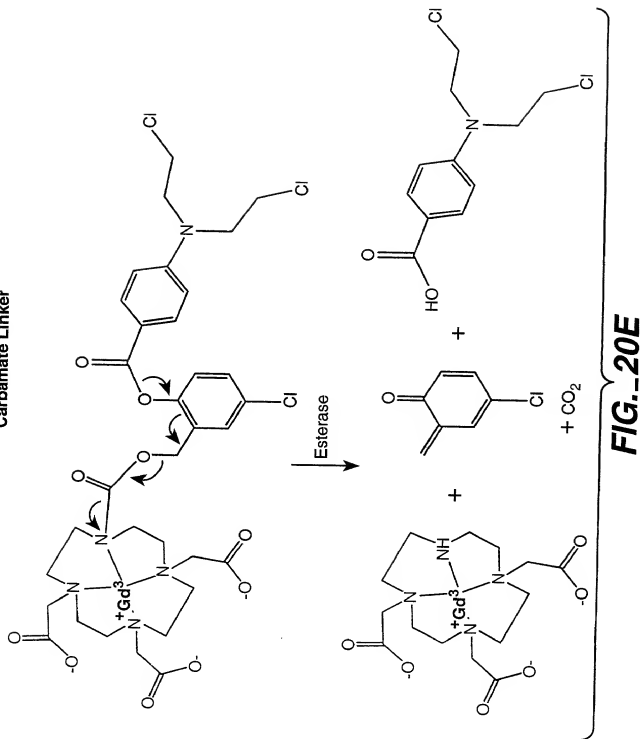


Ester Linkage II

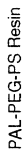


20250721 15:59:56

Carbamate Linker



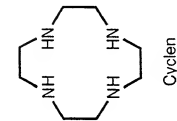
I.



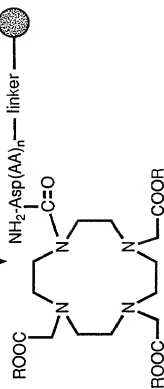
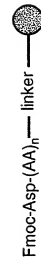
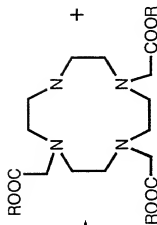
in DMF

Fmoc AA-OH/HOAc/HATU/DIEA

1. N-ε-Fmoc-ε-amino-R acid
[H₂C(CH₂)_x-NH-Fmoc]
2. Fmoc-AA-OH
3. Fmoc-AA-OH
4. (Fmoc-AA-OH)_n
5. Fmoc-Asp-OH

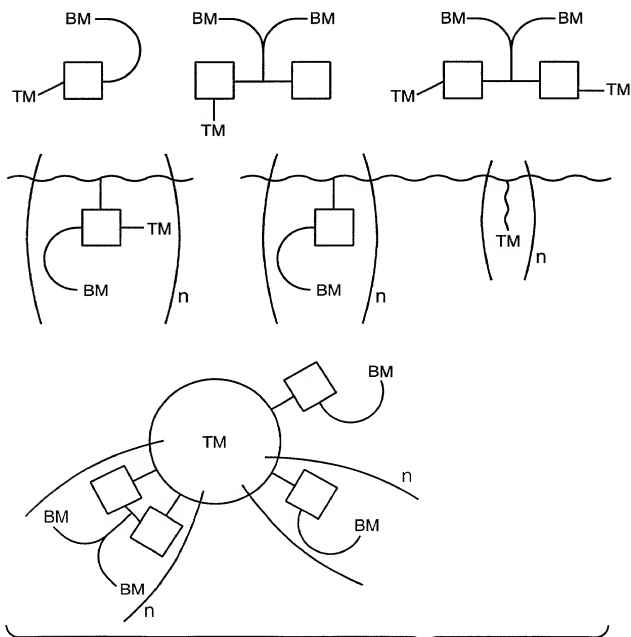
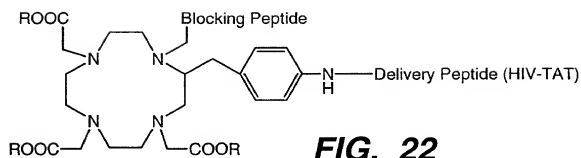


Cyclen



III.

FIG. 21



09866512.021302